CENTER FOR HEALTH STATISTICS
DATA SUMMARY

REPORT REGISTER NO. DS99-07000
(July 1999)

HOMICIDE DEATHS, CALIFORNIA, 1980-1997

Introduction

This report focuses on trends in homicide deaths during the period 1980 through 1997, and provides analysis of crude and age-adjusted death rates for California residents by sex, age, race/ethnicity, and county. The definition of homicide used in this report is based on the ICD-9 codes E960-E969 traditionally presented in California Center for Health Statistics reports. In contrast, the National Center for Health Statistics in the publication *Monthly Vital Statistics Report*, presents ICD-9 codes E960-E978 which include homicide and legal intervention as a single category.[1] The United States Public Health Service has established six health objectives pertaining to homicide which are published in *Healthy People 2000*.[2] California's progress in meeting the first year 2000 national health objective, an age-adjusted death rate of no more than 7.2 homicides per 100,000 population, will be addressed in this report. The Center for Health Statistics publication, *Healthy California 2000* is another reference for research related to the *Healthy People 2000* goals as they pertain to California.[3]

Homicide Deaths

As shown in **Table 1** (page 5), homicide deaths fluctuated substantially between 1980 and 1997. The highest number of deaths occurred in 1993 (4,206) and the lowest in 1983 (2,702). During the time span covered by this report, the number of deaths attributed to homicide was consistently much higher among males than among females. The average number of deaths among males (2,672.4) was over four times higher than the average number of deaths among females (634.4) for the 18-year period.

Due to the unavailability of mutually exclusive data for Hispanics and Whites for the years prior to 1985, **Table 2** (page 6) presents homicide death data by the four major race/ethnic groups from 1985 to 1997. During this period, the average number of homicide deaths among Hispanics (1,284.9) was higher than Blacks (1,006.9), Whites (945.6), and Asian/Other (184.3).

Table 3 (page 7) displays homicide death data for 1997 by the four major race/ethnic groups, by age group, and by sex. Homicide deaths occur predominantly among males, especially young males, and this held true in 1997 with 55 percent of all homicide deaths involving males between the ages of 15 and 34. This male age group, within each respective race/ethnic group, accounted for 67 percent of all deaths among Hispanics, 60 percent of all deaths among Blacks, 48 percent of all deaths among Asian/Other, and 31 percent of all deaths among Whites. Males of all ages accounted for 83 percent of all homicide deaths in 1997. Within the Hispanic race/ethnic group, males accounted for 1,049 deaths (89 percent) and females accounted for 131 deaths (11 percent). Among Blacks, 601 homicide deaths (84 percent) were attributed to males and 116 deaths (16 percent) to females. In the White race/ethnic group, males had 505 deaths (73 percent) and females had 186 deaths (27 percent). In the Asian/Other group, males had 150 homicide deaths (78 percent) and females had 42 homicide deaths (22 percent). The number of homicide deaths among Hispanics (1,180) was higher than Blacks (717), Whites (691) or Asian/Other (192).

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Homicide Crude Death Rates

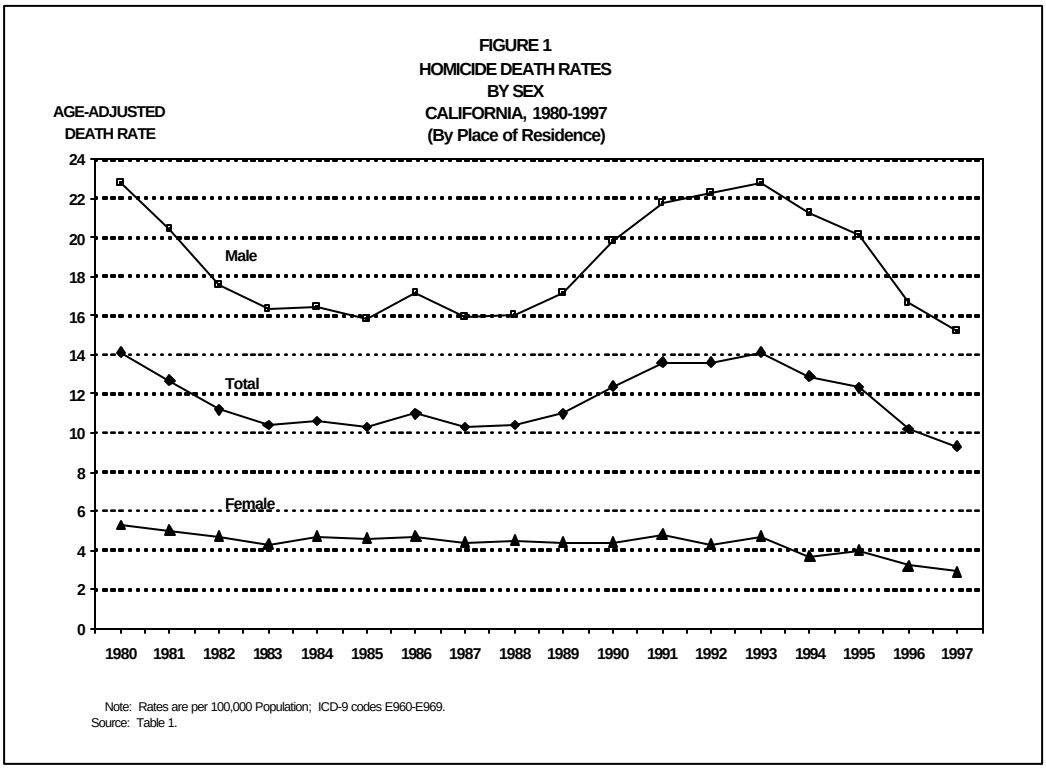
Examination of the overall crude death rate (**Table 1**, page 5) showed no statistically significant trend during the time span of this report, though the rate showed a notable decline from 1993 to 1997. The crude rate ranged from a high of 14.5 per 100,000 population in 1980 to a low of 8.4 in 1997. Analysis of the data by sex shows that from 1980 to 1997 the crude death rate for males was consistently much higher than for females. The crude death rate for males was highest in 1980 at 23.8, then declined to 16.5 in 1985, then increased to 22.0 in 1993 and then dropped to a low of 13.9 in 1997. The crude death rate for females decreased from a high of 5.5 in 1980 down to a low of 2.9 in 1997; this was a statistically significant decline.

Table 2 (page 6) shows that the crude death rate for Blacks was much higher than the crude death rate for any of the other three race/ethnic groups. The highest crude death rate for Blacks occurred in 1993 (57.8 per 100,000 population) and the lowest in 1997 (31.2). The crude death rate for Hispanics was highest in 1992 (20.2) and lowest in 1997 (12.2). For Asian/Other, the highest crude death rate occurred in 1991 (7.6) and the lowest in 1987 (4.6). Whites were the only race/ethnic group with a statistically significant trend in their crude death rate, a 38 percent decline from 1985 (6.5) to 1997 (4.0).

Homicide Age-Adjusted Death Rates

In 1997, the California age-adjusted death rate due to homicide was 9.3 deaths per 100,000 population, while the United States age-adjusted death rate for homicide and legal intervention was 7.5.[4]

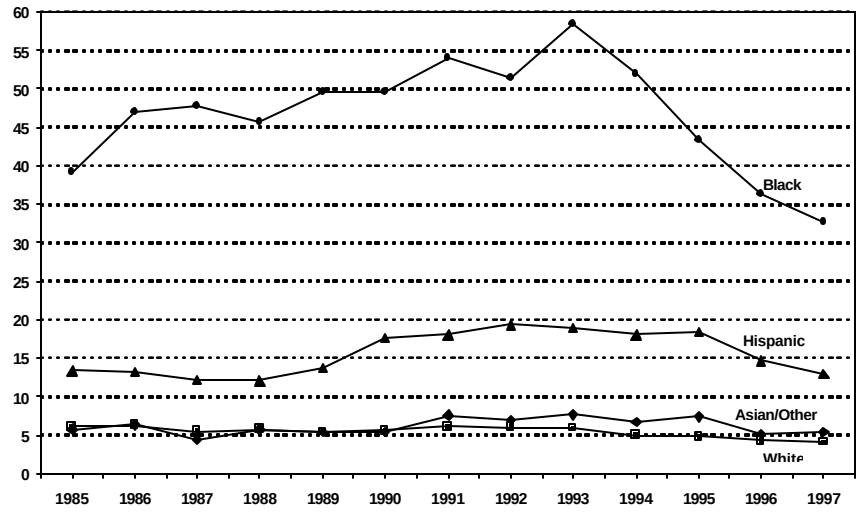
As shown in **Figure 1**, California's age-adjusted death rate varied substantially over the 18-year period; it declined from 14.1 in 1980 to 10.3 in 1987 then rose again to 14.1 in 1993 then declined to 9.3 in 1997. Regression analysis showed no significant trend in the age-adjusted death rate over this time period, though the decline in the rates from 1993 to 1997 was significant. Also, due to the fluctuation of the rates, it could not be ascertained whether California will meet the *Healthy People 2000* goal of no more than 7.2 homicide age-adjusted deaths per 100,000 population, though the decline in the rate from 14.1 in 1993 to 9.3 in 1997 is encouraging. During all 18 years the male age-adjusted death rate was much higher than the female rate. Similar to the total age-adjusted death rates, the male age-adjusted death rate fluctuated over the years with a rate of 22.8 in 1980 dropping to 15.8 in 1985, then rising to 22.8 in 1993 and then declining to 15.2 in 1997. In contrast to the male rate, the female age-adjusted death rate experienced a significant downward trend from a high of 5.3 in 1980 to a low of 2.9 in 1997, a decline of 45 percent.



Homicide Age-Adjusted Death Rates (continued)

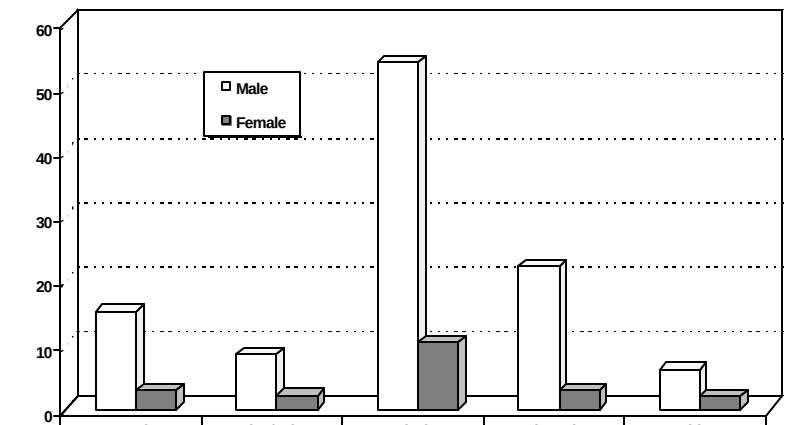
As illustrated in **Figure 2**, Blacks had a significantly higher homicide age-adjusted death rate than the other three race/ethnic groups. The highest age-adjusted death rate for Blacks (58.5 per 100,000 population) occurred in 1993, the lowest (32.6) occurred in 1997. Among Hispanics the highest age-adjusted death rate occurred in 1992 (19.4), the lowest in 1988 (12.1). The highest rate for Asian/Other (7.7) was in 1993, the lowest (4.5) in 1987. As in the crude death rate discussed previously, Whites were the only race/ethnic group with a statistically significant trend in their age-adjusted death rate, a 33 percent decline from 1985 (6.1) to 1997 (4.1).

FIGURE 2
HOMICIDE DEATH RATES
BY RACE/ETHNICITY
CALIFORNIA, 1985-1997
(By Place of Residence)



Note: Rates are per 100,000 population; ICD-9 codes E960-E969.
White, Black, and Asian/Other exclude Hispanic ethnicity. Hispanic includes any race category.
Source: Table 2.

FIGURE 3
HOMICIDE DEATH RATES
BY RACE/ETHNICITY AND SEX
CALIFORNIA, 1997
(By Place of Residence)



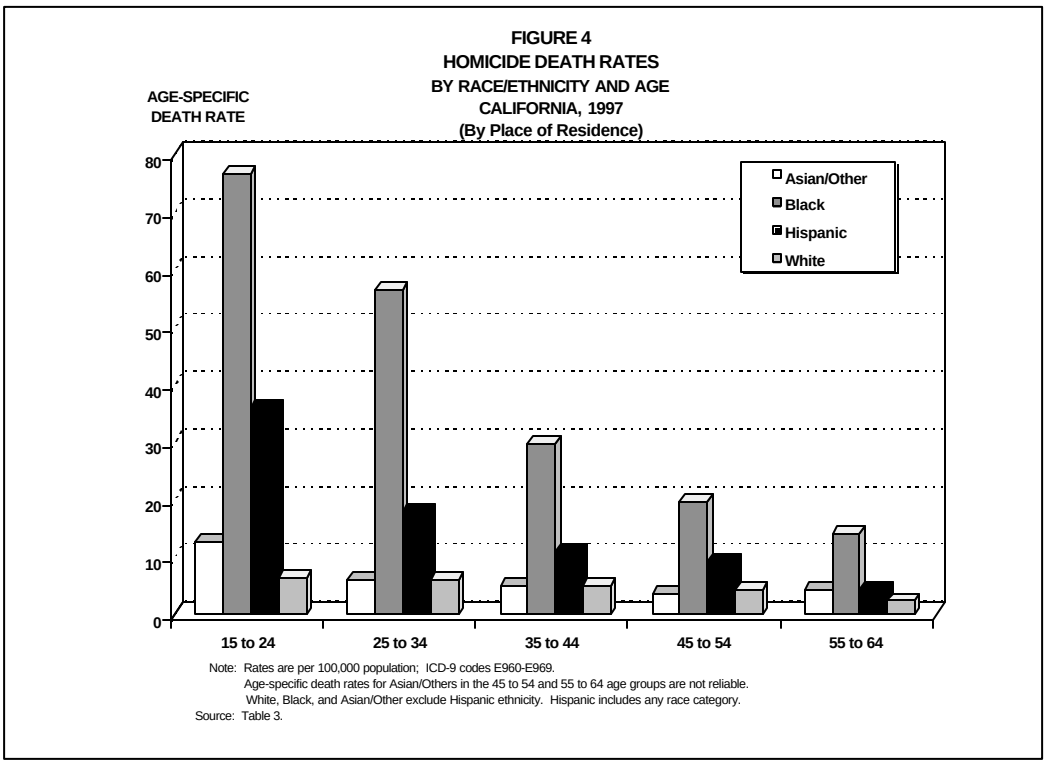
	Total	Asian/Other	Black	Hispanic	White
Male	15.2	8.5	53.8	22.1	6.1
Female	2.9	2.2	10.3	2.9	2.0

Note: Rates are per 100,000 population; ICD-9 codes E960-E969.
White, Black, and Asian/Other exclude Hispanic ethnicity. Hispanic includes any race category.
Source: State of California, Department of Finance, Race/Ethnic 1997 Population Projections for Counties with Age and Sex Detail, December 1998.
State of California, Department of Health Services, Death Records.

Figure 3 shows that Black males had the highest age-adjusted death rate (53.8 per 100,000 population) in 1997, a rate 2.4 times higher than the rate for Hispanic males (22.1), 6.3 times higher than the rate for Asian/Other males (8.5), and 8.8 times higher than the rate for White males (6.1). The differences between all four of these rates are statistically significant. The homicide age-adjusted death rate for Black females was significantly higher than the rates for females in the other three race/ethnic groups. Black females had the highest age-adjusted death rate (10.3) in 1997, a rate 3.6 times higher than Hispanic females (2.9), 4.7 times higher than Asian/Other females (2.2), and 5.2 times higher than White females (2.0).

Homicide Age-Specific Death Rates

Figure 4 shows the significantly higher age-specific death rate for Blacks in the five age groups from 15 to 24 through 55 to 64. **Figure 4** also shows that Hispanics had the second highest age-specific death rate in these age groups. Whites had the lowest homicide age-specific death rate in four of the five age groups; the exception was the 25 to 34 age group where Whites shared the lowest rate with Asian/Other.



In **Table 3** (page 7) reliable age-specific death rates show that Black, Hispanic, and White males consistently had higher rates than their female counterparts in the same age groups (there were no reliable age-specific death rates for Asian/Other females so no comparison was made with Asian/Other males). **Table 3** also shows the extremely high age-specific death rates for Black males in the 15 to 24 age group (129.7) and in the 25 to 34 age group (97.3). Hispanic males also had a very high homicide death rate (64.5) in the 15 to 24 age group.

Homicide Death Rates among California Counties

Table 4 (page 8) displays the number of deaths, crude death rates, and age-adjusted death rates by county averaged over a three-year period, 1995 to 1997. This averaging is done to reduce the large fluctuations in the death rates that are inherent among counties with a small number of events and/or population.

The highest average number of homicide deaths occurred in Los Angeles County (1,465.7) and the lowest in Alpine, Amador, Modoc, and Sierra Counties, which had no deaths due to homicide during the three year period.

The highest and lowest reliable crude death rates due to homicide were in Los Angeles County (15.6 per 100,000 population) and Santa Clara County (3.3), respectively.

The rankings for age-adjusted death rates due to homicide were Los Angeles County with the highest reliable age-adjusted death rate (17.7 per 100,000 population) and Santa Clara County with the lowest (3.6).

TABLE 1
DEATHS DUE TO HOMICIDE
BY SEX
CALIFORNIA. 1980-1997
(By Place of Residence)

SEX	EVENT YEAR	DEATHS	POPULATION	CRUDE RATE	AGE-ADJUSTED RATE	95% CONFIDENCE LIMITS LOWER	UPPER
TOTAL							
	1997	2,780	32,956,588	8.4	9.3	8.9	9.6
	1996	3,007	32,383,811	9.3	10.2	9.8	10.5
	1995	3,623	32,062,912	11.3	12.3	11.9	12.8
	1994	3,821	31,790,557	12.0	12.9	12.4	13.3
	1993	4,206	31,515,753	13.3	14.1	13.7	14.5
	1992	4,092	31,186,559	13.1	13.6	13.2	14.1
	1991	4,071	30,563,276	13.3	13.6	13.2	14.0
	1990	3,703	29,942,397	12.4	12.4	11.9	12.8
	1989	3,270	29,142,106	11.2	11.0	10.6	11.4
	1988	3,054	28,393,094	10.8	10.4	10.0	10.8
	1987	2,949	27,716,860	10.6	10.3	9.9	10.7
	1986	3,089	27,052,291	11.4	11.0	10.6	11.4
	1985	2,818	26,402,633	10.7	10.3	9.9	10.7
	1984	2,833	25,816,294	11.0	10.6	10.2	11.0
	1983	2,702	25,336,301	10.7	10.4	10.0	10.7
	1982	2,864	24,805,011	11.5	11.2	10.8	11.6
	1981	3,196	24,277,674	13.2	12.7	12.3	13.2
	1980	3,445	23,780,068	14.5	14.1	13.6	14.5
MALE							
	1997	2,305	16,526,191	13.9	15.2	14.5	15.8
	1996	2,498	16,227,924	15.4	16.7	16.0	17.3
	1995	2,998	16,062,552	18.7	20.1	19.3	20.8
	1994	3,236	15,921,009	20.3	21.3	20.6	22.1
	1993	3,466	15,782,166	22.0	22.8	22.0	23.5
	1992	3,411	15,616,376	21.8	22.3	21.5	23.0
	1991	3,336	15,301,183	21.8	21.8	21.0	22.5
	1990	3,044	14,989,516	20.3	19.8	19.0	20.5
	1989	2,618	14,573,988	18.0	17.2	16.6	17.9
	1988	2,384	14,181,700	16.8	16.0	15.3	16.6
	1987	2,297	13,825,118	16.6	15.9	15.2	16.5
	1986	2,435	13,474,197	18.1	17.2	16.5	17.9
	1985	2,170	13,130,674	16.5	15.8	15.1	16.4
	1984	2,193	12,818,768	17.1	16.4	15.7	17.1
	1983	2,130	12,559,834	17.0	16.3	15.6	17.0
	1982	2,245	12,275,613	18.3	17.6	16.9	18.4
	1981	2,552	11,993,514	21.3	20.4	19.6	21.2
	1980	2,786	11,722,769	23.8	22.8	22.0	23.7
FEMALE							
	1997	475	16,430,397	2.9	2.9	2.7	3.2
	1996	509	16,155,887	3.2	3.2	2.9	3.5
	1995	625	16,000,360	3.9	4.0	3.7	4.3
	1994	585	15,869,548	3.7	3.7	3.4	4.0
	1993	740	15,733,587	4.7	4.7	4.4	5.1
	1992	681	15,570,183	4.4	4.3	4.0	4.7
	1991	735	15,262,093	4.8	4.8	4.4	5.1
	1990	659	14,952,881	4.4	4.4	4.1	4.7
	1989	652	14,568,118	4.5	4.4	4.0	4.7
	1988	670	14,211,394	4.7	4.5	4.1	4.8
	1987	652	13,891,742	4.7	4.4	4.1	4.8
	1986	654	13,578,094	4.8	4.7	4.3	5.0
	1985	648	13,271,959	4.9	4.6	4.2	5.0
	1984	640	12,997,526	4.9	4.7	4.3	5.1
	1983	572	12,776,467	4.5	4.3	3.9	4.6
	1982	619	12,529,398	4.9	4.7	4.4	5.1
	1981	644	12,284,160	5.2	5.0	4.6	5.4
	1980	659	12,057,299	5.5	5.3	4.9	5.7

Note : Rates are per 100,000 population. ICD-9 codes E960-E969.

Source : State of California, Department of Finance, Race/Ethnic Population for Counties with Age and Sex Detail, Estimated July 1, 1970-1996 and Projections for 1997. December 1998.
State of California, Department of Health Services, Death Records.

TABLE 2
DEATHS DUE TO HOMICIDE
BY RACE/ETHNICITY
CALIFORNIA. 1985-1997
(By Place of Residence)

RACE/ ETHNICITY	EVENT YEAR	DEATHS	POPULATION	CRUDE RATE	AGE-ADJUSTED RATE	95% CONFIDENCE LIMITS LOWER	UPPER
ASIAN/OTHER							
	1997	192	3,778,911	5.1	5.4	4.6	6.1
	1996	184	3,645,998	5.0	5.2	4.5	6.0
	1995	247	3,530,931	7.0	7.4	6.5	8.3
	1994	217	3,429,125	6.3	6.7	5.8	7.6
	1993	245	3,323,013	7.4	7.7	6.7	8.7
	1992	217	3,209,399	6.8	7.0	6.1	7.9
	1991	234	3,068,424	7.6	7.6	6.6	8.6
	1990	163	2,930,570	5.6	5.4	4.6	6.3
	1989	156	2,774,167	5.6	5.4	4.6	6.3
	1988	155	2,616,586	5.9	5.8	4.8	6.7
	1987	114	2,465,134	4.6	4.5	3.7	5.4
	1986	147	2,313,141	6.4	6.4	5.3	7.4
	1985	125	2,158,886	5.8	5.8	4.8	6.8
BLACK							
	1997	717	2,298,425	31.2	32.6	30.2	35.0
	1996	805	2,275,401	35.4	36.3	33.8	38.8
	1995	954	2,250,502	42.4	43.3	40.5	46.1
	1994	1,144	2,232,841	51.2	52.0	48.9	55.0
	1993	1,280	2,214,376	57.8	58.5	55.2	61.7
	1992	1,137	2,192,451	51.9	51.4	48.4	54.4
	1991	1,171	2,147,691	54.5	54.0	50.9	57.2
	1990	1,083	2,105,207	51.4	49.6	46.6	52.6
	1989	1,068	2,061,823	51.8	49.6	46.6	52.7
	1988	969	2,024,779	47.9	45.7	42.8	48.6
	1987	996	1,992,361	50.0	47.7	44.7	50.7
	1986	974	1,958,844	49.7	47.1	44.1	50.0
	1985	792	1,923,209	41.2	39.2	36.5	42.0
HISPANIC							
	1997	1,180	9,700,944	12.2	13.0	12.2	13.8
	1996	1,295	9,330,740	13.9	14.7	13.9	15.5
	1995	1,613	9,100,994	17.7	18.4	17.5	19.4
	1994	1,602	8,882,966	18.0	18.1	17.2	19.0
	1993	1,656	8,658,118	19.1	18.9	18.0	19.8
	1992	1,702	8,421,133	20.2	19.4	18.5	20.4
	1991	1,585	8,097,870	19.6	18.1	17.2	19.1
	1990	1,479	7,774,789	19.0	17.6	16.6	18.5
	1989	1,091	7,419,574	14.7	13.7	12.8	14.5
	1988	911	7,077,579	12.9	12.1	11.3	12.9
	1987	866	6,754,398	12.8	12.2	11.4	13.1
	1986	879	6,428,436	13.7	13.2	12.3	14.1
	1985	845	6,103,662	13.8	13.4	12.4	14.3
WHITE							
	1997	691	17,178,308	4.0	4.1	3.8	4.4
	1996	723	17,131,672	4.2	4.3	3.9	4.6
	1995	809	17,180,485	4.7	4.8	4.5	5.2
	1994	858	17,245,625	5.0	5.0	4.7	5.4
	1993	1,025	17,320,246	5.9	5.9	5.5	6.3
	1992	1,036	17,363,576	6.0	6.0	5.6	6.4
	1991	1,081	17,249,291	6.3	6.1	5.7	6.5
	1990	978	17,131,831	5.7	5.6	5.2	6.0
	1989	955	16,886,542	5.7	5.4	5.1	5.8
	1988	1,019	16,674,150	6.1	5.8	5.4	6.2
	1987	973	16,504,967	5.9	5.5	5.1	5.8
	1986	1,089	16,351,870	6.7	6.3	5.9	6.7
	1985	1,056	16,216,876	6.5	6.1	5.7	6.4

Note : Rates are per 100,000 population. ICD-9 codes E960-E969.
White, Black, and Asian/Other exclude Hispanic ethnicity. Hispanic includes any race category.

Source : State of California, Department of Finance, Race/Ethnic Population for Counties with Age and Sex Detail, Estimated July 1, 1970-1996 and Projections for 1997. December 1998.
State of California, Department of Health Services, Death Records.

TABLE 3
DEATHS DUE TO HOMICIDE
BY RACE/ETHNICITY. AGE. AND SEX
CALIFORNIA. 1997
(By Place of Residence)

RACE/ ETHNICITY	AGE GROUPS	1997 DEATHS			AGE-SPECIFIC DEATH RATE			95% CONFIDENCE LIMITS					
								TOTAL		MALE		FEMALE	
		TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	LOWER	UPPER	LOWER	UPPER	LOWER	UPPER
TOTAL													
	Under 1	33	19	14	6.0	6.8	5.2 *	4.0	8.1	3.7	9.9	2.5	8.0
	1 to 4	58	31	27	2.6	2.7	2.5	1.9	3.2	1.7	3.6	1.5	3.4
	5 to 14	69	52	17	1.3	2.0	0.7 *	1.0	1.7	1.4	2.5	0.4	1.0
	15 to 24	987	898	89	23.0	40.3	4.3	21.6	24.5	37.6	42.9	3.4	5.2
	25 to 34	728	631	97	13.7	22.5	3.9	12.7	14.7	20.8	24.3	3.1	4.7
	35 to 44	451	345	106	8.2	12.3	3.9	7.4	8.9	11.0	13.6	3.2	4.7
	45 to 54	243	185	58	6.1	9.4	2.9	5.4	6.9	8.0	10.8	2.2	3.6
	55 to 64	91	67	24	3.7	5.7	1.9	3.0	4.5	4.3	7.0	1.2	2.7
	65 to 74	63	45	18	3.2	5.1	1.7 *	2.4	4.0	3.6	6.6	0.9	2.5
	75 to 84	35	17	18	2.9	3.5 *	2.5 *	1.9	3.9	1.8	5.2	1.4	3.7
	85 & Older	11	5	6	2.8 *	4.2 *	2.2 *	1.2	4.5	0.5	7.8	0.4	4.0
	Unknown	11	10	1									
	Total	2,780	2,305	475	8.4	13.9	2.9	8.1	8.7	13.4	14.5	2.6	3.2
ASIAN/OTHER													
	Under 1	3	2	1	4.9 *	6.4 *	3.4 *	0.0	10.5	0.0	15.3	0.0	9.9
	1 to 4	4	1	3	1.6 *	0.8 *	2.4 *	0.0	3.1	0.0	2.3	0.0	5.2
	5 to 14	11	7	4	1.9 *	2.3 *	1.4 *	0.8	3.0	0.6	4.0	0.0	2.7
	15 to 24	69	64	5	12.6	22.7	1.9 *	9.6	15.6	17.2	28.3	0.2	3.5
	25 to 34	37	29	8	6.0	9.4	2.6 *	4.1	8.0	6.0	12.8	0.8	4.5
	35 to 44	33	22	11	5.1	7.0	3.3 *	3.3	6.8	4.1	10.0	1.3	5.2
	45 to 54	17	13	4	3.6 *	5.9 *	1.6 *	1.9	5.4	2.7	9.1	0.0	3.2
	55 to 64	12	7	5	4.4 *	5.5 *	3.5 *	1.9	7.0	1.4	9.6	0.4	6.6
	65 to 74	3	3	0	1.5 *	3.5 *	0.0 +	0.0	3.3	0.0	7.5	-	-
	75 to 84	2	1	1	2.0 *	2.3 *	1.7 *	0.0	4.7	0.0	6.8	0.0	5.1
	85 & Older	1	1	0	3.3 *	7.7 *	0.0 +	0.0	9.7	0.0	22.7	-	-
	Unknown	0	0	0									
	Total	192	150	42	5.1	8.1	2.2	4.4	5.8	6.8	9.4	1.5	2.8
BLACK													
	Under 1	5	2	3	13.5 *	10.5 *	16.6 *	1.7	25.3	0.0	25.1	0.0	35.3
	1 to 4	15	10	5	9.3 *	12.2 *	6.3 *	4.6	14.0	4.6	19.8	0.8	11.8
	5 to 14	15	12	3	3.8 *	5.9 *	1.5 *	1.9	5.7	2.6	9.3	0.0	3.2
	15 to 24	266	238	28	76.7	129.7	17.1	67.4	85.9	113.2	146.2	10.8	23.5
	25 to 34	218	195	23	56.4	97.3	12.3	48.9	63.8	83.6	110.9	7.3	17.4
	35 to 44	113	80	33	29.8	43.5	16.9	24.3	35.3	33.9	53.0	11.1	22.7
	45 to 54	50	37	13	19.7	31.0	9.7 *	14.2	25.2	21.0	40.9	4.4	14.9
	55 to 64	22	16	6	14.0	21.8 *	7.2 *	8.2	19.9	11.1	32.5	1.4	13.0
	65 to 74	10	8	2	9.7 *	18.0 *	3.4 *	3.7	15.7	5.5	30.5	0.0	8.1
	75 to 84	2	2	0	3.5 *	9.5 *	0.0 +	0.0	8.4	0.0	22.6	-	-
	85 & Older	0	0	0	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
	Unknown	1	1	0									
	Total	717	601	116	31.2	53.0	10.0	28.9	33.5	48.7	57.2	8.2	11.8
HISPANIC													
	Under 1	18	10	8	6.9 *	7.5 *	6.3 *	3.7	10.1	2.9	12.2	1.9	10.7
	1 to 4	19	11	8	1.8	2.1 *	1.6 *	1.0	2.7	0.9	3.3	0.5	2.7
	5 to 14	16	14	2	0.8 *	1.4 *	0.2 *	0.4	1.2	0.7	2.1	0.0	0.5
	15 to 24	531	494	37	36.0	64.5	5.2	32.9	39.1	58.8	70.2	3.5	6.9
	25 to 34	326	293	33	17.8	28.5	4.1	15.9	19.7	25.2	31.8	2.7	5.5
	35 to 44	157	132	25	10.9	17.4	3.7	9.2	12.6	14.4	20.3	2.2	5.1
	45 to 54	74	62	12	9.3	15.3	3.0 *	7.1	11.4	11.5	19.2	1.3	4.7
	55 to 64	19	17	2	4.4	8.1 *	0.9 *	2.4	6.3	4.2	11.9	0.0	2.1
	65 to 74	12	9	3	4.1 *	6.8 *	1.9 *	1.8	6.4	2.4	11.2	0.0	4.0
	75 to 84	4	3	1	3.0 *	5.6 *	1.3 *	0.1	5.9	0.0	11.9	0.0	3.7
	85 & Older	1	1	0	2.0 *	5.7 *	0.0 +	0.0	5.9	0.0	16.9	-	-
	Unknown	3	3	0									
	Total	1,180	1,049	131	12.2	20.9	2.8	11.5	12.9	19.6	22.1	2.3	3.3
WHITE													
	Under 1	7	5	2	3.7 *	5.2 *	2.2 *	1.0	6.5	0.6	9.7	0.0	5.2
	1 to 4	20	9	11	2.5	2.2 *	2.8 *	1.4	3.6	0.8	3.6	1.2	4.5
	5 to 14	27	19	8	1.2	1.7	0.8 *	0.8	1.7	0.9	2.5	0.2	1.3
	15 to 24	121	102	19	6.3	10.2	2.1	5.2	7.4	8.2	12.2	1.1	3.0
	25 to 34	147	114	33	6.0	9.0	2.7	5.0	6.9	7.4	10.7	1.8	3.7
	35 to 44	148	111	37	4.9	7.2	2.5	4.1	5.6	5.8	8.5	1.7	3.3
	45 to 54	102	73	29	4.2	6.0	2.4	3.4	5.0	4.6	7.3	1.5	3.2
	55 to 64	38	27	11	2.4	3.5	1.4 *	1.7	3.2	2.2	4.8	0.6	2.2
	65 to 74	38	25	13	2.8	4.0	1.8 *	1.9	3.7	2.5	5.6	0.8	2.7
	75 to 84	27	11	16	3.0	3.0 *	2.9 *	1.8	4.1	1.2	4.8	1.5	4.4
	85 & Older	9	3	6	3.1 *	3.6 *	2.9 *	1.1	5.1	0.0	7.6	0.6	5.2
	Unknown	7	6	1									
	Total	691	505	186	4.0	5.9	2.1	3.7	4.3	5.4	6.5	1.8	2.5

Note : Rates are per 100,000 population. ICD-9 codes E960-E969.
White, Black, and Asian/Other exclude Hispanic ethnicity. Hispanic includes any race category.

Source : State of California, Department of Finance, Race/Ethnic 1997 Population Projections for Counties with Age and Sex Detail. December 1998.
State of California, Department of Health Services, Death Records.

* Death rate unreliable, relative standard error is greater than or equal to 23%.
\+ Standard error indeterminate, death rate based on zero deaths.
\- Upper and lower limits at the 95% confidence level are not calculated for zero deaths.

TABLE 4
DEATHS DUE TO HOMICIDE
BY COUNTY
CALIFORNIA, 1995-1997
(By Place of Residence)

COUNTY	1995-1997 DEATHS (Average)	PERCENT	1996 POPULATION	CRUDE RATE	AGE-ADJUSTED RATE	95% CONFIDENCE LIMITS LOWER	UPPER
CALIFORNIA	3,136.7	100.0	32,383,811	9.7	10.6	10.3	11.0
ALAMEDA	166.7	5.3	1,365,041	12.2	13.5	11.3	15.6
ALPINE	0.0	0.0	1,194	0.0 +	0.0 +	-	-
AMADOR	0.0	0.0	32,925	0.0 +	0.0 +	-	-
BUTTE	9.3	0.3	196,522	4.7 *	5.4 *	1.9	9.0
CALAVERAS	1.3	a	36,881	3.6 *	3.6 *	0.0	9.8
COLUSA	1.0	a	18,197	5.5 *	6.6 *	0.0	19.5
CONTRA COSTA	81.3	2.6	877,965	9.3	10.5	8.2	12.9
DEL NORTE	2.0	0.1	27,527	7.3 *	7.3 *	0.0	17.7
EL DORADO	3.0	0.1	144,710	2.1 *	2.3 *	0.0	5.0
FRESNO	97.0	3.1	769,709	12.6	13.5	10.8	16.3
GLENN	0.3	a	26,699	1.2 *	1.2 *	0.0	5.2
HUMBOLDT	6.0	0.2	125,100	4.8 *	5.2 *	1.0	9.4
IMPERIAL	10.3	0.3	141,229	7.3 *	7.5 *	2.8	12.1
INYO	0.3	a	18,225	1.8 *	3.4 *	0.0	14.7
KERN	62.3	2.0	624,092	10.0	10.6	8.0	13.3
KINGS	10.0	0.3	115,774	8.6 *	8.6 *	3.2	14.0
LAKE	4.0	0.1	54,884	7.3 *	7.4 *	0.0	15.3
LASSEN	1.7	0.1	32,631	5.1 *	4.5 *	0.0	11.3
LOS ANGELES	1,465.7	46.7	9,396,389	15.6	17.7	16.7	18.6
MADERA	11.7	0.4	110,298	10.6 *	11.1 *	4.7	17.5
MARIN	5.0	0.2	239,630	2.1 *	2.5 *	0.1	4.8
MARIPOSA	1.0	a	15,965	6.3 *	9.8 *	0.0	29.1
MENDOCINO	7.0	0.2	84,817	8.3 *	8.2 *	1.9	14.5
MERCED	12.0	0.4	198,390	6.0 *	6.7 *	2.9	10.5
MODOC	0.0	0.0	10,028	0.0 +	0.0 +	-	-
MONO	0.3	a	10,565	3.2 *	3.2 *	0.0	14.2
MONTEREY	31.3	1.0	360,253	8.7	10.0	6.4	13.6
NAPA	1.7	0.1	118,949	1.4 *	1.4 *	0.0	3.8
NEVADA	2.7	0.1	87,001	3.1 *	3.5 *	0.0	8.2
ORANGE	136.0	4.3	2,649,846	5.1	5.8	4.8	6.9
PLACER	7.0	0.2	209,167	3.3 *	3.6 *	0.8	6.3
PLUMAS	1.3	a	20,239	6.6 *	8.3 *	0.0	23.3
RIVERSIDE	128.3	4.1	1,393,289	9.2	10.4	8.5	12.2
SACRAMENTO	101.3	3.2	1,132,189	9.0	10.0	8.0	12.0
SAN BENITO	0.7	a	44,008	1.5 *	1.5 *	0.0	5.1
SAN BERNARDINO	183.3	5.8	1,592,711	11.5	12.4	10.6	14.2
SAN DIEGO	168.3	5.4	2,694,956	6.2	6.2	5.2	7.1
SAN FRANCISCO	63.0	2.0	768,263	8.2	9.0	6.6	11.5
SAN JOAQUIN	65.7	2.1	533,177	12.3	13.5	10.2	16.9
SAN LUIS OBISPO	6.7	0.2	230,691	2.9 *	3.0 *	0.6	5.3
SAN MATEO	31.7	1.0	698,042	4.5	5.3	3.4	7.2
SANTA BARBARA	16.3	0.5	393,716	4.1 *	4.3 *	2.1	6.4
SANTA CLARA	53.7	1.7	1,638,352	3.3	3.6	2.6	4.6
SANTA CRUZ	7.0	0.2	243,657	2.9 *	3.0 *	0.7	5.3
SHASTA	9.7	0.3	161,688	6.0 *	6.5 *	2.2	10.7
SIERRA	0.0	0.0	3,401	0.0 +	0.0 +	-	-
SISKIYOU	3.0	0.1	43,945	6.8 *	7.5 *	0.0	16.3
SOLANO	25.7	0.8	372,493	6.9	7.3	4.4	10.2
SONOMA	12.7	0.4	424,481	3.0 *	3.3 *	1.4	5.2
STANISLAUS	36.3	1.2	418,455	8.7	9.2	6.2	12.2
SUTTER	4.0	0.1	74,591	5.4 *	5.3 *	0.0	10.7
TEHAMA	3.7	0.1	54,353	6.7 *	8.4 *	0.0	17.2
TRINITY	1.7	0.1	13,328	12.5 *	16.5 *	0.0	43.7
TULARE	32.7	1.0	353,645	9.2	10.0	6.5	13.5
TUOLUMNE	0.3	a	51,583	0.6 *	0.6 *	0.0	2.6
VENTURA	30.3	1.0	714,845	4.2	4.7	3.0	6.4
YOLO	6.7	0.2	152,535	4.4 *	4.3 *	1.0	7.6
YUBA	4.7	0.1	60,575	7.7 *	8.6 *	0.7	16.5

Note : Rates are per 100,000 population. ICD-9 codes E960-E969.

* Death rate unreliable, relative standard error is greater than or equal to 23%.

\+ Standard error indeterminate, death rate based on zero deaths.

\- Upper and lower limits at the 95% confidence level are not calculated for zero deaths.

a Represents a percentage of more than zero but less than 0.05.

Source : State of California, Department of Finance, Race/Ethnic Population Estimates by County with Age and Sex Detail, 1970-1996, December 1998.
State of California, Department of Health Services, Death Records.

TABLE 5
POPULATION PROJECTIONS
BY RACE/ETHNICITY. SEX. AND AGE
CALIFORNIA. 1997

RACE/ ETHNICITY	TOTAL	AGE GROUPS										
		Under 1	1 to 4	5 to 14	15 to 24	25 to 34	35 to 44	45 to 54	55 to 64	65 to 74	75 to 84	85 & Older
TOTAL	32,956,588	546,131	2,249,298	5,126,178	4,286,123	5,295,602	5,515,973	3,967,625	2,429,264	1,946,517	1,202,900	390,977
MALE	16,526,191	279,304	1,150,795	2,623,010	2,230,566	2,801,396	2,804,567	1,968,640	1,181,279	880,656	485,972	120,006
FEMALE	16,430,397	266,827	1,098,503	2,503,168	2,055,557	2,494,206	2,711,406	1,998,985	1,247,985	1,065,861	716,928	270,971
ASIAN/OTHER	3,778,911	61,048	253,970	590,572	547,654	611,613	650,006	466,296	270,313	195,736	101,250	30,453
MALE	1,857,107	31,238	130,697	302,505	281,371	308,552	312,746	221,016	127,549	85,009	43,392	13,032
FEMALE	1,921,804	29,810	123,273	288,067	266,283	303,061	337,260	245,280	142,764	110,727	57,858	17,421
BLACK	2,298,425	37,118	161,406	399,123	346,981	386,835	379,215	253,810	156,691	103,210	56,622	17,414
MALE	1,134,572	18,999	81,910	202,091	183,464	200,505	184,086	119,474	73,379	44,398	21,083	5,183
FEMALE	1,163,853	18,119	79,496	197,032	163,517	186,330	195,129	134,336	83,312	58,812	35,539	12,231
HISPANIC	9,700,944	259,482	1,033,436	1,950,967	1,474,904	1,830,949	1,440,680	799,904	434,968	292,243	133,418	49,993
MALE	5,026,168	132,657	526,924	995,128	766,061	1,027,720	760,047	403,910	210,015	132,556	53,617	17,533
FEMALE	4,674,776	126,825	506,512	955,839	708,843	803,229	680,633	395,994	224,953	159,687	79,801	32,460
WHITE	17,178,308	188,483	800,486	2,185,516	1,916,584	2,466,205	3,046,072	2,447,615	1,567,292	1,355,328	911,610	293,117
MALE	8,508,344	96,410	411,264	1,123,286	999,670	1,264,619	1,547,688	1,224,240	770,336	618,693	367,880	84,258
FEMALE	8,669,964	92,073	389,222	1,062,230	916,914	1,201,586	1,498,384	1,223,375	796,956	736,635	543,730	208,859

Note : White, Black, and Asian/Other exclude Hispanic ethnicity. Hispanic includes any race category.

Source : State of California, Department of Finance, Race/Ethnic 1997 Population Projections for Counties with Age and Sex Detail. December 1998.

Notes:

The homicide death data presented in this report is ICD-9 codes E960-E969.

The term "significant" within the text indicates either statistically significant based on the slope of a least-squares line not equal to zero ($p<.05$), or statistically significant based on the difference between two independent rates ($p<.05$).

As with any vital statistics data, caution needs to be exercised when analyzing small numbers, including the rates derived from them. Death rates calculated from a small number of deaths and/or population tend to be unreliable and subject to significant variation from one year to the next. To assist the reader, 95 percent confidence intervals are provided in the data tables as a tool for measuring the reliability of the death rates. Rates with a relative standard error (coefficient of variation) greater than or equal to 23 percent are indicated with an "*" (asterisk). Also, three-year averages were used in Table 4 (page 8) to increase the reliability of the rates derived from small numbers, and to reduce the year-to-year variability inherent among these rates.

The four race/ethnic groups presented in the tables are mutually exclusive. White, Black, and Asian/Other exclude Hispanic ethnicity, while Hispanic includes any race/ethnic group. In order to remain consistent with the population data obtained from the Department of Finance, the "White race/ethnic group" includes: White, Other (specified), Not Stated, and Unknown; and the "Asian/Other race/ethnic group" includes: Aleut, American Indian, Asian Indian, Asian (specified/unspecified), Cambodian, Chinese, Eskimo, Filipino, Guamanian, Hawaiian, Japanese, Korean, Vietnamese, Other Pacific Islander, Samoan, Thai, and Laotian. Race/ethnic data are not presented for years prior to 1985 due to the unavailability of mutually exclusive data for Hispanics and Whites. In addition, caution should be exercised in the interpretation of mortality data by race/ethnicity. Misclassification of race/ethnicity on the death certificate may contribute to death rates that may be underestimated among Hispanics and Asian/Other.[5]

The method used to analyze vital statistics data is also important. Analyzing only the number of deaths has its disadvantages and can be misleading because the population at risk is not taken into consideration. Crude death rates, on the other hand, show the actual rate of dying in a given population, but the age composition of that population is not taken into consideration. Therefore, the use of age-adjusted death rates becomes the preferred method for measuring death rates over time, and for comparing death rates between race/ethnic groups, sex, and geographic areas. For homicide as the cause of death, the victims tend to be younger than for other leading causes such as heart disease or diabetes. Consequently, the effect of age-adjusting is less significant, and the homicide age-adjusted death rates are relatively similar to their crude rates. The 1940 United States (standard million) population was used as the basis for age-adjusting in this report.

For a more complete explanation of the age-adjusting methodology see the *Healthy People 2000 Statistical Notes* publication.[6] Detailed information on data quality and limitations as well as the formulas used to calculate vital statistics rates are presented in the appendix of the annual report, *Vital Statistics of California*.[7] Another source of information is the Department of Health Services, Center for Health Statistics Home Page [www.dhs.ca.gov/org/hisp/chs/chsindex.htm].

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